

**THERMAL TOLERANT CELLULASE FROM ACIDOTHERMUS CELLULOLYTICUS****Abstract of the Disclosure**

- 5 The invention provides a thermal tolerant (thermostable) cellulase that is a member of the glycoside hydrolase family. The invention further discloses this cellulase as AviIII. AviIII has been isolated and characterized from Acidothermus cellulolyticus. The invention further provides recombinant forms of the identified AviIII. Methods of making and using AviIII polypeptides, including fusions, variants, and derivatives, are also disclosed.